Special 4-Pages on Nuclear Testing

Inside: Stassen's Testimony on How A Soviet-American Agreement Could Be Policed and Inspected

I. F. Stone's Weekly

VOL. VI, NO. 10 MARCH 10, 1958 WASHINGTON, D. C. 15 CENTS

Dr. Teller's Campaign Against A Ban on Testing

Dr. Edward Teller's first victory in his fight to continue nuclear testing occurred last year when an agreement seemed imminent. This was in June, a few weeks after the Russians for the first time agreed at London to the establishment of inspection posts on their territory. Harold Stassen alluded to this when he told the Humphrey disarmament subcommittee here that a Presidential press conference last June showed that Ike himself was then prepared to go along with Stassen's plan for an agreement with the Russians to suspend nuclear tests for two years as a first step toward disarmament. Mr. Stassen discreetly forbore to mention the swift aftermath of that press conference.

The "Clean Bomb" Intervenes

It was held on Wednesday, June 19. The transcript bears out Mr. Stassen's claim. The President that day expressed a willingness to break up the unwieldy disarmament package and negotiate a suspension of tests apart from more difficult problems. This was the high-point of Mr. Stassen's career, and also the beginning of his decline. The following Monday, Admiral Strauss of the Atomic Energy Commission turned up at the White House with Dr. Teller and Dr. Ernest O. Lawrence. The visit produced sensational headlines about the possibility of a clean bomb. When Mr. Eisenhower met the press again two days later, he had begun to waver. He said the scientists had told him, "give us four or five years to test each step of our development and we will produce an absolutely clean bomb . . . there will be no fallout to injure any civilian or anyone, any innocent bystanders." Thanks to this visit, as the *New York Times* reported next day, the President "had had some second thoughts about the wisdom of ending nuclear bomb tests." These second thoughts finally prevailed, and Mr. Stassen lost his job in the effort to overcome them.

Now that world pressure is rising for an agreement, Dr. Teller is campaigning again, but has changed his line of argument; world reaction last year to talk of a clean bomb which would not hurt "innocent bystanders" was too derisory. This time Dr. Teller is arguing that inspection cannot be relied upon because secret tests are possible. "Actually," he wrote in the January issue of *Foreign Affairs,* "a nuclear test is easily noticed only if it is performed in the most obvious manner. There can be no doubt that if a nation wants to carry out tests in secrecy, observation will become difficult and uncertain." He added, "Of course, it will cost some money and effort to hide nuclear explosions. But the Soviet Union has never been stingy where a military advantage has been at stake." (We're not exactly parsimonious either). This line was echoed almost in the same words in his article for *Life* (Feb. 10) and in the Rockefeller Brothers report for which Dr. Teller was the scientific adviser.

Dr. Teller's Point of View

"I believe that disarmament is a lost cause."
—Meet the Press, Sunday, March 2.

"We must overcome the popular notion that nuclear weapons are more immoral than conventional weapons."
—This Week Magazine, Oct. 13, 1957.

Dr. Teller created the impression that the possibility of secret tests was a known fact. But a more careful reading of those documents and of his interview on *Meet the Press* (March 2) will show that this is not quite so. "If they [the Russians] are determined to continue testing," he said in that TV interview, "and if they are intelligent enough to elude the check which we are discussing, I am *virtually* certain that they will find methods to cheat." (Our italics). "Virtually certain" is not the same as his earlier statement in *Life,* "There can be no doubt that this is possible." The ambiguity became more apparent when Mr. Spivak asked him, "are you saying that we ourselves have secret methods of testing or that we ourselves can devise secret methods, or do you just think that the Russians can?" To this Dr. Teller replied that "we have not given a great deal of attention and effort to devise secret methods of testing" because we would abide by any agreement. "At the same time," he continued, "the question has arisen and there have been discussions and these discussions convince me that there are very serious, very effective possibilities of hiding nuclear tests."

How Prove Two Negatives?

A witness who testified so vaguely in a court of law would get into difficulties. But as propaganda Dr. Teller's line is deadly in the one field where there seemed firm hope of an enforcible agreement. Those who would rebut him have the impossible task of proving two negatives—that the Russians would not try to cheat and that they could not find some way of evading inspection. At the same time there is no way to put Dr. Teller in the witness chair and ask him to be more specific. Is he speaking of large explosions or only small? And if small (there is no reason to believe that any large explosions can be kept secret), how small? If he is speaking of explosions high up in the stratosphere or deep underground, how useful would such tests be?

When the AEC tried its first underground test in Nevada last September 19 (using a bomb Mr. Stassen's testimony reveals was "smaller than even the earliest bombs we had"), it seemed to hope that this would prove the possibility of secret tests. The *New York Times* story next morning from

(*Continued on Page Four*)

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Stassen's Testimony Feb. 28 on the Feasibility of Inspection Machinery . . .

Mr. STASSEN: . . . an agreement to open up mutually on both sides to the establishment of the necessary inspection stations to monitor and assure a cessation of nuclear testing. These inspection stations would require approximately 11 or 12 within the territory of the Soviet Union, an even number in the territories of the United States, both continental and extra-continental, and these inspection stations should be equipped with the essential scientific instruments which are seismic, acoustic, electromagnetic and radiation measuring in their nature, and be manned by competent personnel under the United Nations. . . .

Senator HUMPHREY. So you openly disagree with the President's position in his cablegram to the Prime Minister of India?

Mr. STASSEN. I today to you recommend a first step agreement that consists of four parts as I have outlined, and I point out to you that in the President's press conference in June of 1957 he expressed a view that was entirely consistent with and of the same spirit as the recommendation I am making to you this morning. . . . Let me also give the genesis of the recommendation that I make. It springs out of the negotiations and studies over this period of years.

You will find that the first important recommendation for a short term suspension of nuclear tests, which is the one of the four parts, came from Prime Minister Nehru. . . .

Mr. STASSEN. That was one of the cardinal points in our recommendations that we publicly made, that is to the President, and publicly revealed, that any commitment the United States makes should have attached to it the necessary inspection. And these inspection posts I speak of are an absolute essential of the first step agreement.

If Tests Held Underground

And with these scientific instruments, the seismic instruments are very sensitive, so are the acoustics, the electromagnetic and the radiation measuring one, you can have a very effective inspection system. In fact, it is a matter of public information and I can say to you, that that very small nuclear shot that was put out underground in last year's test was recorded in every seismic instrument within a thousand miles.

Now when the seismic instruments record that shot, it of course does not say that it is a nuclear shot. It shows that something caused a tremor from a certain location. Then these inspectors must have the right to go to the area indicated on their instruments to see whether or not the seismic or acoustic or electromagnetic indications came from a nuclear test that was not authorized, or whether they were caused by an earthquake or some other kind of natural phenomena.

If Tests Held In Stratosphere

That would be a part of the inspection system, and the delicate electromagnetic and acoustic instruments pick this up at a great range, and with the radar approach, if the shots are sent up into the upper atmosphere, why you find the missile going up.

So I think 11 or 12 inspection stations properly placed throughout the Soviet Union territory and the United States and our Alaskan and Pacific islands will make it as certain as anything on earth can be certain that unauthorized and illegal tests could not be conducted without being observed.

No Absolute Certainty Possible

Now you cannot of course say with an absolute scientific certainty, because nothing on this earth can be absolutely scientifically certain, but it can be as certain as any matter with which human beings are concerned. . . .

Senator SALTONSTALL. The Soviets never showed any inclination to agree to let any inspectors from these stations to travel in areas of Soviet territory, did they?

Mr. STASSEN. Yes, they did.

Senator SALTONSTALL. I thought they limited it to a 500 mile radius from their borders.

Mr. STASSEN. No; that is the other type of inspection, Senator. That was in the open sky zones that were under negotiation. That is a matter of other steps to take up. But they did not put any geographic limitation when they responded to our requirements of inspection posts and scientific instruments in the London negotiations in regard to the suspension of testing.

Now of course when you come down to specifically outlining those 11 or 12 posts and what instruments they would have and what personnel they would have, it is possible that you would find an intransigeant point of something essential on the part of the Soviet Union, and that you could not go forward. But the indications are that this is the most favorable, sound and mutual move that could be made in the armaments control field.

How Soon It Could Be Done

Mr. STASSEN. It is my view that this first step [a two year cessation of nuclear testing] could be negotiated within the next six months successfully with all the states concerned. I believe it would best be consummated at a summit meeting between the heads of government. I feel such a summit meeting, if we begin to prepare for it along these lines now, could be held within four or five months, that it I think could best be held at the United Nations with the Secretary General as sort of a moderator and manager of it, so that all the other nations felt that this was within the United Nations context, was not something that was pulling away from the United Nations, and I believe that a treaty along these lines could actually come before the U. S. Senate before this session ends, BECAUSE ALL OF THE TECHNICAL, THE LEGAL, THE SCIENTIFIC WORK IS IN AN ADVANCED STAGE. [Emphasis added.]

—Before the Senate Disarmament Subcom. Feb. 28.

What About The Need for Developing A Clean Bomb for Peaceful Uses?

Sen. HUMPHREY. Another argument, Mr. Stassen, that has been presented against suspending weapons tests relates to the need for testing in order to reduce the amount of fallout resulting from explosions, radioactive fallout. . . .

Mr. STASSEN. It is not a valid argument. There is no scientist who claims that they are going to have a completely clean weapon within two years. They speak of it as something where research in process in five or six years might prove it out, so it does not affect the first two years, and I do not believe any scientist would come before you and claim that he is going to be ready to test a completely clean weapon in two years. . . .

But going on beyond, in the longer range term, if the scientists in any country develop a completely clean nuclear explosion, that has peaceful potential to move great mountains of earth, to open up harbors, to dig canals, the international tests of such a clean explosion could be included in any future treaty under international participation, because then you would want that knowledge of a clean explosion to be known by all countries, and you would want to turn it to peaceful uses.

—Testimony, Senate Disarmament Subcommittee, Feb. 28.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

. . . Provides the Answers to Teller's Campaign Against A Nuclear Test Ban

Not Enough Inspectors Available?

Senator HUMPHREY. You are familiar, Mr. Stassen, with the attitude expressed before this subcommittee and in public statements by Admiral Strauss wherein he has indicated that we do not have enough trained inspectors to supervise this type of agreement. . . .

Mr. STASSEN. Just let me interject that there would not be a personnel problem. In other words, these 12 inspection stations with international personnel, there are ample competent men in the world to man these 12 stations on both sides.

Why So Much Secrecy About the Inspection Studies?

Senator HUMPHREY. You recall that one of the task forces that you were to appoint was one that related to development of plans and proposals for inspection. Am I correctly informed on that?

Mr. STASSEN. We had nine task groups. . . . All had to do with different types of inspection.

Senator HUMPHREY. We have tried to receive some information concerning the work of those task forces, Mr. Stassen. Has the work of those task forces been completed?

Mr. STASSEN. I think any question now of the activity within the Administration should not be put to me.

Senator HUMPHREY. Were they completed up to last month?

Mr. STASSEN. Those task forces served very ably during the time that I had the responsibility.

Senator HUMPHREY. What is so secret about what a task force is doing in the field of inspection, for example? I frankly cannot understand this. The American people are vitally concerned, No. 1, that if we enter into any type of disarmament agreement, that it is one that has reasonable assurances and guarantees of success, and of non-violation.

In other words, that it will be reasonably secure and trustworthy. Therefore it appears to me that the discussion of these matters is of the utmost public importance and should be as much as possible public.

Now I can understand where the AEC [Atomic Energy Commission] may have some very delicate instrument or some delicate scientific device that it may not for the moment want to divulge or expose to public view, but I must say that if we can have discussions before committees of Congress as to the latest missiles and rockets and discussions as to anti-missiles and submarine missiles and all of the most fantastic technical developments, why can't we have this discussion as to what is being recommended by a task force in so far as inspection devices and inspection programs are concerned.

Mr. STASSEN. There is no reason why you could not have testimony on any of these inspection and scientific matters.

The Tactical Weapon Argument

Sen. HUMPHREY. A third argument against the suspension of nuclear explosions is that tests of small nuclear weapons are essential in order to perfect weapons for tactical use in the eventuality of local conflicts. . . . What is your response to this argument?

Mr. STASSEN. We already have tactical weapons that are very efficient. It, of course, is true that continued testing will refine and spread the weapons on both sides, but that specifically is a thing that should be reciprocally stopped in the interest of the best prospects for peace. . . .

—Sen. Disarmament Subcommittee, Feb. 28.

Could They Cheat by Satellite Testing?

Senator HUMPHREY. I imagine some people will ask under these arrangements would it not be possible for one of our friendly allies to conduct a test for us of our weapons, even though they did it in their name, and we might well ask might it not be possible for one of the satellite states to conduct tests for the USSR, conducting them in their name but using a Soviet weapon. How do we get around that?

Mr. STASSEN. It would not be possible for them to do it without it being detected. By that I mean if there is a devious avoidance of the two-year commitment on either side, it would be known promptly by the other side and by the world with this inspection system, and with our continuation of our regular intelligence methods, and consequently you would then know, that is if we cheated in this manner, they would know that there is no use trying to go beyond the two years into further steps. If they cheat in the first two years, we will know it is no use trying to go further in further steps with them, and that is a very important thing to find out on each side.

Therefore, it is my view that since there is such a mutual interest in avoiding the kind of a future that otherwise will face both sides that the agreement would be respected. . . .

More on Underground and Stratospheric Shots

Mr. STASSEN. . . . If you put the shot down under, it has been proven that seismic recordings can be picked up even on the smallest shot, and that test shot [underground last year in Nevada] is known to have been much smaller than even the earliest bombs we had, and if they try to put it up out of the atmosphere, then the process by which the rocket goes up itself can be recorded by radar and then the airplane can fly up to see or test rockets can be sent to see whether there was a nuclear explosion on the end of that rocket.

So that if you put the competent scientists to work, and they are international, they are not limited to the Soviet Union and the United States, an inspection system can be put in that is as certain as anything human can be.

The Danger in Insisting from The Start on A Cutoff in Nuclear Production

Mr. STASSEN. There is no question that the cessation of production of nuclear material for weapons purposes is a very important thing to attain. It, however, is not the most important thing to attain, and it is impossible to attain it in a short range because it requires a most comprehensive inspection system that I feel could only be designed and installed in three or four years of time, because to inspect a cutoff of production of nuclear materials for weapons purposes you would need inspectors in every nuclear installation, including power plants and production on both sides.

You would need the right to look for other plants that were not reported. In other words, to inspect the whole of the Soviet Union from end to end, and you would need the right to keep track of the nuclear material that is produced, account for it, follow it and audit it from the time it was produced on through its use in various power plants or ships and so forth.

Therefore if you make the complete accomplishment of that kind of an inspection system a prerequisite for taking any step, you in effect make it impossible to make any in the years immediately ahead, and in the meantime nuclear weapons spread around the world and the danger to mankind goes to very extreme limits.

—Testimony, Senate (Humphrey) Disarmament Subcommittee, Feb. 28.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Stassen Provides An Authoritative Answer to Teller in A Hush-Hush Area

(*Continued from Page One*)

Las Vegas (City Edition) said "the experiment seemed to have conformed with predictions of AEC scientists that the explosion would not be detectible more than a few hundred miles away." But that same day's paper already carried cables from Toronto and Rome saying the shock had been recorded.

Detected and Measured Same Day

The Sunday before Dr. Teller appeared on *Meet the Press*, the Russians let off a nuclear explosion and by 7:10 p. m. that same day the Atomic Energy Commission here in Washington telephoned the press that it was "a weapons test . . . in the megaton range." If the occurrence, the character and the magnitude of a Russian test could be determined so quickly on the other side of the globe in Washington the same day it took place, methods of detection must be marvellously refined. Indeed, despite strict censorship, a whole range of detection devices have been mentioned. We have seismic instruments to measure the earth tremor. We have others which register the electromagnetic waves set off. We can determine the kind of explosion from the dust particles it spreads around the world. We have radar near the Russian border which can "see" into a considerable part of their territory. These are only the known devices.

Is it possible that inspection stations set every 500 miles or so across American and Russian territory and equipped with such devices could fail to detect a nuclear explosion? Mr. Stassen believes such stations manned by scientists under UN direction could provide a system of detection as foolproof as human ingenuity can devise. Dr. Teller has been able to wage a hint-and-run campaign, casting a deadly pall on the hopes of mankind, without ever being required to discuss this question specifically. Mr. Stassen's detailed testimony on this very problem before the Humphrey subcommittee two days before Dr. Teller's appearance on *Meet the Press* is the first authoritative answer to the scientist, and we think it a pity that so little attention was paid it by the press. The reports turned in by the task force teams which Mr. Stassen set up at the White House to study every aspect of the inspection problem have not been made public. The whole subject is being kept under wraps by the AEC, which wants testing to continue. Mr. Stassen could not discuss the specific content of these reports but his testimony is to be read as reflecting the knowledge thus acquired. In this testimony, which we reprint inside this week's issue, he discusses publicly for the first time the whispers about secret tests high in the sky and deep in the earth and how they, too, could be detected. We believe this testimony deserves close study and wide distribution in the fight for peace.

Is Fallout as Negligible as Dr. Teller Says?

"World-wide fallout is as dangerous to human health as being one ounce overweight or smoking one cigarette every two months."

—Dr. Teller on Meet the Press, Mar. 2.

"Collecting the uncertainties inherent in any attempt to evaluate the biological consequences of nuclear weapons tests, past and future, one loses confidence in all prediction.

"If tests stop, or do not increase in fission yield, and if stratospheric fallout proves to be uniform, and if the estimates of 'average soil' prove correct (or too pessimistic), and if Sr-90 distribution in human bone proves to be Gaussian, and if there proves to be a threshold dose for radiation, then there will be little to be concerned about for the next five or ten years.

"On the other hand, should the 'test rate' increase, should stratospheric fall-out prove very varied, should the estimates of discrimination factors and the concept 'average soil' prove too optimistic, should the distribution of Sr-90 in human bone prove to be log normal or worse, should small amounts of radiation—10 to 100 rads—prove to be carcinogenic [cancer producing]—should all these possibilities prove true, then the consequences of even another five years' testing could be serious. . . .

"Thus, from the purely scientific point of view, many uncertainties preclude the drawing of final conclusions concerning the hazards of weapons testing. All judgment is essentially moral in character. From what I suppose, then, to be a 'moral bias,' my own conclusion is that nuclear tests should be stopped, if it is at all possible to do so with safety."

—Dr. Wm. F. Neuman, "Uncertainties in Evaluating the Effects of Fall-Out from Weapons Tests", Bulletin of the Atomic Scientists, Jan. 1958, a "paper based in part on work performed under contract with the U. S. Atomic Energy Commission at the University of Rochester."

Extra Copies of This Issue May Be Obtained at Bulk Rates for Wider Distribution

I. F. Stone's Weekly, 5618 Nebraska Ave., N. W. Washington 15, D. C.

Please renew (or enter) my sub for the enclosed $5:*

Name .....

Street .....

City .....**Zone**.....**State**.....

Enter gift sub for $2 (6 mos.) or $4 (1 yr.) additional:

(To) Name .....

Street .....

City .....**Zone**.....**State**.....

Shall we send gift announcement? Yes ☐ No ☐

I. F. Stone's Weekly
5618 Nebraska Ave., N. W.
Washington 15, D. C.

NEWSPAPER

Entered as Second Class Mail Matter Washington, D. C. Post Office

I. F. Stone's Weekly. Entered as Second Class Matter at Washington, D. C., under the Act of March 3, 1879. Post-dated Mondays but published every Thursday except the last two Thursdays of August and December at 5618 Nebraska Ave., N. W., Washington 15, D. C. An independent weekly published and edited by I. F. Stone; Circulation Manager, Esther M. Stone. Subscription: $5 in th U. S.; $6 in Canada; $10 elsewhere. Air Mail rates: $15 to Europe; $20 to Israel, Asia and Africa.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED